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Lawrence, C. and Rimmer, J. (2020) *Pilot study: Can the draft film Broken support trainee teachers' understanding of autism communication issues in mainstream classrooms?* Teacher Education Advancement Network Journal, 12 (1). ISSN 2054-5266

*This is a manuscript accepted for publication in Teacher Education Advancement Network Journal*

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**Pilot study: Can the draft film *Broken* support trainee teachers' understanding of autism communication issues in mainstream classrooms?**

Teacher Education Advancement  
Network Journal  
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University of Cumbria  
Vol 12(1) pages

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**Abstract**

The draft film *Broken* (Rimmer, 2020) is an artistic impression that aims to articulate dysfluency from an autistic viewpoint. This paper reports on a pilot study to evaluate the effectiveness of the film as a tool to support trainee teachers' understanding of fluency issues in autistic pupils in the mainstream classroom. The study positions what is a personal perspective as articulated in the film within the wider autism literature, and reports and discusses trainees' responses to the film. Implications for future Initial Teacher Education in this area – including resultant adaptations of the film – are discussed.

**Key words**

Autism; dysfluency; film; multi-modal; teacher education.

**Introduction**

This paper reports on a pilot study to investigate the use of the draft film, *Broken* (Rimmer, 2020), co-created by an autistic individual Fauxparl (a pseudonym) and Dr John Rimmer, a visual artist, as a potential support for teachers' understanding regarding communication in autism. It investigates trainee teachers' perceptions of autism communication as influenced by the film, explores preconceptions and misconceptions, and evaluates trainees' responses regarding the use of such a film to support their understanding. Implications for adaptations of the film to more strongly support Initial Teacher Education in this area are discussed.

Importantly, the film *Broken* was co-created by an autistic individual, and that perspective and understanding is central to this study. There is a growing acceptance that on both epistemic and ethical grounds 'evidence supports placing autistic perspectives centrally within autism studies' (Wood and Waltz, 2019 p. 3). Indeed, failure to include autistic perspective in research may mean that non-autistic report may miss what would otherwise be obvious (Bracic, 2018), which is a concept that is central to this study as discussed in the conclusion.

Fauxparl and Rimmer worked together to create an evocation from Fauxparl's individual perspective. Autism is intensely heterogenic, and the manifestation as depicted in the film is, by its nature, intensely personal. However, the film strives to capture other fluency experiences as recorded in the literature, and through this to give insight to the neuro-typical viewer of what these experiences may be, specifically in a classroom context and from the pupil perspective. In line with research identifying preferences within the autism community (Kenny et al., 2016) the term 'autistic' is used throughout this paper.

**Literature**

A definition of autism indicates that it is characterised by difficulties with social communication and interaction (American Psychiatric Association, 2013) with these difficulties recognised as including elements of language use (McElroy et al., 2018; Wiklund & Laakso, 2019). Dysfluency is identified as

**Citation**

Lawrence, C., and Rimmer, J. (2020) 'Pilot study: Can the draft film *broken* support trainee teachers' understanding of autism communication issues in mainstream classrooms?', *TEAN journal*, 12(1), pp.

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an 'interruption in the flow of speaking characterized by atypical rate, rhythm, and repetitions in sounds, syllables, words, and phrases' (American Speech-Language-Hearing Association, 1993, n.p.). Presentations of autism dysfluencies as recorded in the literature include, for example, mid-syllable insertion (Smith and Coppala, 2018), stutters, (McElroy et al., 2018) and word or part-word repetition (McElroy et al., 2018; Smith and Coppala, 2018). Some autistic people are identified as using inconsistent or alternative personal pronouns and autistic speakers have been found to include fewer pronouns in narratives (Colle et al., 2008). Some autistic people utilise echolalia or may create neologisms (De Giacomo et al., 2016). Speech disfluency in autistic individuals may increase when they are anxious or distressed (Carroll, 1986 in Smith & Coppala, 2018) and dysfluency in autism has been found to contribute to communication difficulties between speaker and listener (Wiklund & Laakso, 2019; Barnard-Dadds & Conn, 2018). The draft film *Broken* aims to capture many of these as experienced from a pupil perspective, specifically references stuttering, echolalia and word and part-word repetitions overtly in the soundscape, and word replacement, inconsistent pronoun use and neologisms additionally through visual presentation.

A strong intended purpose of the film is to convey the experience of not being encouraged to or supported to speak in the classroom. This experience is in keeping with research that suggests that stigma in autism may be related to communication. In a recent investigation into autism stigma in the college classroom (Underhill, Ledford and Adams, 2019) it was found that 'atypical verbal and non-verbal communication behaviours often associated with ASD resulted in negative first impressions and lower interpersonal evaluations by college peers' (p. 178). The situation also resonates with research by Wood (2020) with so-termed 'non-verbal' autistic children and the way that their communication is sometimes 'ignored and the cogency of [the child's] message denied'. It seems that for some autistic people, it is not so much that they may struggle to communicate, but that their communication is only validated if what they say is what the other in the exchange (in this example a teacher) wants to hear. When input from autistic pupils appears 'off message' it may be ignored (Wood, 2020 p. 118). In the film, the background classroom element plays on without reference to the foregrounded first-person perspective, suggesting something of this being overlooked or disregarded.

The spinning elements of the film reference a particular enjoyment experienced by some autistic individuals. Fauxparl indicates that he likes the way objects will visually transform when spinning and how the association with spinning clothes means that he finds the sound of a washing machine soothing. A pleasure in spinning has been noted in autism as far back as Kanner's original 1943 paper, where he noted that his patient 'spun with great pleasure anything he could seize upon to spin' (Kanner 1943: 219 in Lilley, 2017, p. 4). In the film this transformation element is captured by compression of the vertical axis. The turning squiggles and repeated transforming shapes represent 'repetitive, usually rhythmic behaviour that is commonly expressed through body movements' (Kapp et al., 2019 p. 1785). These 'stimming' behaviours have been reported to be an important means of self-regulation by autistic people, described as comfortable or calming and as creating 'a feedback loop that ... [i]s self-perpetuated because of the soothing comfort or control afforded by the behaviour' (Kapp et al., 2019 p. 1785). Fauxparl endorses this, describing his complex hand movements and formal, repeated gestures as represented by the shapes as 'relaxing'.

What was clear throughout the making of the film *Broken* is the complexity of Fauxparl's autistic fluency and dysfluency issues. These complexities as they may be present in pupils in mainstream schools is a particular challenge to understand for (predominantly) non-autistic teachers and is therefore a challenge to support within teacher education programmes. This study, therefore, investigates to what extent the draft film *Broken* may provide effective professional development opportunities for trainee teachers to increase their understanding of these issues, and what feedback from trainee teachers suggests for the useful future development of the film within this context.

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### Method

Twenty Students on a one-year post-graduate teacher training course (PGCE) took part in this pilot during a 90-minute session exploring the draft film *Broken* (Rimmer, 2020) and its potential to support their understanding of communication issues in autism in the classroom. The students were training to become mainstream secondary school teachers, specialising in the teaching of either 11 – 16-year olds or 14 – 19-year olds, with their specialist subjects including English, Drama and Social Studies. Ethical approval for the study was obtained and informed consent given by all trainees for their anonymised responses to be used in the study.

The session was introduced as a development of the previous week's lecture on multi-modality in texts (Bhojwani and Wilkie, 2020). This had introduced the concept of a SWIM (sound, Words, Images Motion) proforma to navigate the use of different modalities (Bhojwani and Wilkie, 2018, p. 13). Multi-modality, and the SWIM proforma specifically, provided a template for the trainees to explore an otherwise difficult-to-navigate response to the film *Broken*. The content of the film was introduced through invitation to give a baseline understanding of what they understood by the term 'autistic dysfluency'. All the trainees had already received autism-specific training input into their course, including a lecture on the main theories that can be used to understand autism (Theory of Mind, Local rather than Global Processing Bias and Executive Functioning issues). They had also had the importance of sensory issues in autism highlighted by personal accounts of lived experience by two autistic peer trainees currently on the same course. Each of these inputs referred extensively to communication challenges in autism, although none used the term 'autistic dysfluency' specifically.

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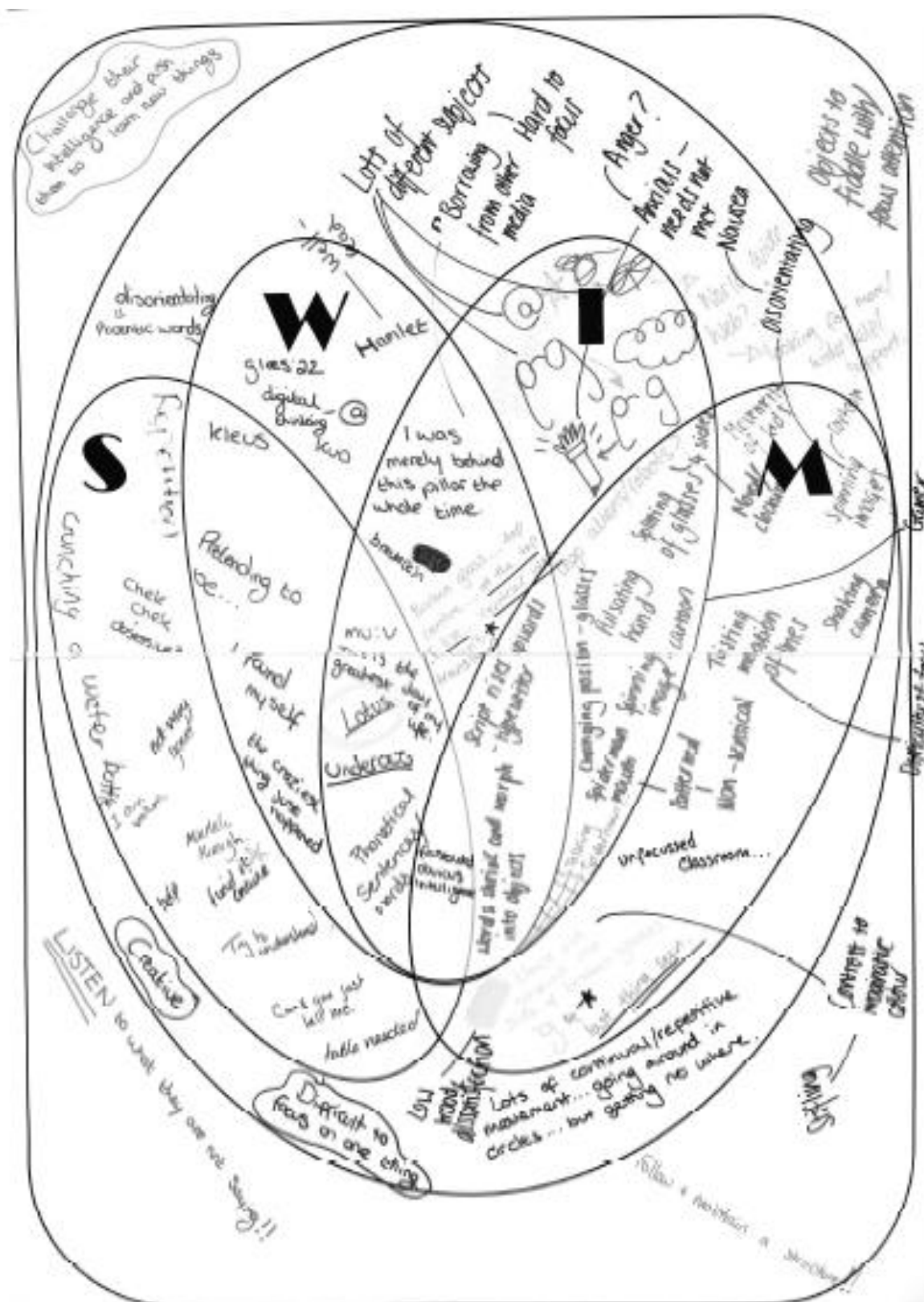


Figure 1. SWIM diagram.

The trainees were shown the film through twice, with initial feedback gathered after the first showing, and were then invited to work in groups to populate the SWIM diagrams (see example at figure 1), recording their experience of the sounds, words, images and motion of the film. At this time, they

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were invited to consider the following research questions in their groups, regarding each element that they had recorded on the SWIM diagrams:

- What might it mean?
- What dysfluencies might it be trying to convey?

After discussion time, the groups were further asked:

- How has the film helped your understanding of autistic dysfluency?
- How might this impact your teaching practice as you support autistic pupils?

These discussions were then summarised individually in completion of two questions:

- Did you find the film helpful in understanding dysfluency from an autistic perspective and, if so, in what ways?
- In what ways might today's session impact on your teaching in the future?

The written responses to these last two questions, together with those given on the SWIM diagrams, were summarised and the results considered.

### Results

A quarter of the trainees in this study (5 out of 20) gave a reasonably confident response to what they believed autistic dysfluency might be, describing it, for example, as 'the struggle in oral and written communication', 'a deficiency in clarity or accuracy' and 'difficulty in communicating coherently'. These fairly generic descriptions were in two cases supplemented by more detail, including that it might include 'not finding the appropriate words' or that 'additional information [might be required] for understanding how to get words out', and two responses suggested that autistic dysfluency might refer to 'body language' or to 'communication without speech'.

The majority of the responses, however, indicated that the trainees had a perceived lack of knowledge about the subject, despite their previous training. 15 of the 20 trainees gave responses of 'I don't know' or 'I'm not sure', with some making guesses such as 'lack of fluency' or 'difficulty in communicating(?)' and others responding 'I know nothing about this subject', 'nothing', 'unsure' or 'no clue'.

Having watched the film, the overwhelming response from the trainees was positive, with strong indication given that they viewed that it had supported them in their development of a greater understanding of this issue. Many trainees reported in particular on the effectiveness of 'understand[ing] the issue from a first-person perspective'. This, they reported, enabled them to 'see how the person sees the world' and that the film 'gave me the visual representation I needed to understand'. Specifically, the trainee teachers felt aware of how the autistic pupil may experience the frustration of dysfluency and 'made it clear how they may view a lesson'. Many trainees suggested that they gained more specific understanding of issues such as distractions and 'how much can be going on' in the mind of a child who otherwise gives no indication. One trainee referred to their greater appreciation of the 'strange processing of information' that may occur in autism and another of the dangers of 'misinterpreted meaning', indicating that 'it also showed me that meaning can be found in something which may seem meaningless to us'. Another identified that 'there was engagement with subject' evident but that this was 'capricious', modifying this judgement with the query that this was 'unpredictable?'. Each of these responses suggests positive engagement with the content of the film and an evaluation of what might be being experienced from the viewpoint of the autistic child.

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Many trainees reported that they found the film distressing, that it was 'exhausting to watch' and that it was 'disorientating'. One trainee reported that they were 'shocked at how uncomfortable the video made me feel' and another that 'the video actually hurt my head'. This was universally contextualised as being a shared distress with the pupil viewpoint and being 'how the student feels in the lesson', suggesting that the film gave 'a vivid insight into a disorientating sensory experience'. This impression of negative experience prompted one trainee to express disbelief, indicating that 'I would have difficulty in believing this is the experience with every autistic student'. Another, who described themselves as having 'a learning difficulty' indicated a negative connection with this film, suggesting that they found that 'videos about my learning difficulty are extreme and reinforce stereotypes that are untrue'.

There was some perception shown of the effects of the multi-modal approach of the film. Trainees indicated that it 'gave visual and auditory examples', 'highlighted aspects (i.e. noise) that I perhaps would not have thought before' and identified that 'there was something of an emotional arc seemingly established through the use of colour'. One trainee was particularly interested in the elements of 'spinning out of control, in and out of different animations', suggesting that these 'must have had reasoning to the individual'.

The general feedback on the film as a teaching tool in this session was positive because 'it ... allowed me to reflect on a teaching topic that I perhaps do not consider enough in my own practice'. One trainee summarised:

As a teacher it can be easy to focus on the here and now, on what is in front of us, but that can't be the case with autistic individuals, as there are a lot of internal and mental challenges.

### Discussion

The trainees' perception of the session was that they had learned from the film. They appeared enthusiastic about the way the film had increased their awareness of an autistic pupil's 'struggle' to be heard, and the majority reported that they had gained from the opportunity to experience a first-person viewpoint.

However, although their feedback responses and particularly their work in groups on the SWIM diagrams showed engagement and some understanding, there was a great deal that they missed and some elements that indicated misinterpretation. These omissions and misinterpretations, when scrutinised, challenge the trainees' perceptions that the film in its current form supports their understanding.

Perhaps the most glaring omissions were at the macro level. Although there was considerable report of 'disorientation' and 'confusion', and although several noted the 'blurring' of the classroom, none of the trainees seemed to make the connection with the broken glasses. Instead, the trainees seemed so concentrated on the fact that this was an autistic perspective that they failed to note the obvious visual reason for the out-of-focus nature of the classroom. They were informed a number of times that what the pupil needed to communicate was that he had broken his glasses and needed to move closer to the board in order to see – and this is referenced specifically in writing twice within the film – yet they nonetheless seem to have taken the blurring to be an autistic trait. They identified that there was a sensory element to what was being experienced, but translated this as disorientation or as being overwhelmed, without questioning the nature of that sensory experience. It seems that once they perceived the child as autistic, they allowed that knowledge to dominate their understanding of the child's perspective, missing the more obvious (and common) sensory challenge of unfocussed eyesight.

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As important is that only one trainee came close to a perception that the failed communication in the film is not in fact caused by the autistic pupil, but by the teacher's inattention. This trainee did recognise that it was 'useful to understand how one simple error from the teacher let down the student', understanding that the pupil is not given the opportunity to express himself so that his level of fluency is not able to be articulated. As Fauxparl describes, being ignored has a powerful effect on self-esteem, yet it is not an element that the vast majority of the trainees perceived. Instead, they positioned the fluency issues fully within the child, with a clear focus on a negative experience and a tendency to posit the autistic person as victim. This was evident in the repeated use of the verb 'to struggle' in feedback: the film was felt to show how much autistic pupils may 'struggle to get the simplest communication out', that it made the trainee 'empathetic to the struggles autistic people have in communicating their feelings and need' and helped to 'sort of understand their daily struggle'.

There was also a strong focus in the feedback on distress. Trainees reported that they found watching the film disorientating, overwhelming and exhausting and used words such as 'dizzy' and 'nausea' to feed back their impressions. They then equated their own apparent distress when watching the film with distress experienced by the pupil: 'It gave visual and auditory examples of how a distressed autistic student/young person may feel'. In fact, we know from Fauxparl's description of the film (personal correspondence) that many elements are included because he finds them pleasurable, calming or soothing. If, as Fauxparl indicates, the film is a valid representation of his experiences, it is interesting to speculate how different sensory stimuli are perceived by the autistic and the non-autistic viewer. It is also interesting to consider the trainees' assumption that an 'autistic' viewpoint would automatically be a negative one of anguish.

Similarly, Fauxparl's interests and enthusiasms, and especially the elements of computer games, were viewed negatively. Many of the trainees picked up the computer game references, specifically being able to correctly identify the game *Undertale* (Fox, 2015), recognising the quotation, "I was merely behind this pillar the whole time" (2:10) which suggests familiarity with the game and potentially a personally positive experience. However, their perception of why computer game elements were present in the film was primarily articulated in terms of distraction. One trainee indicated that it showed how '[pupils with autism] often get distracted' and another that the film allowed them to 'try to see how the person sees the world and how much distraction there can be'. There appears to be a teaching profession element to their responses in this issue, with an innate disapproval evident that the child is not focussed on what the teacher is saying, without a corresponding awareness that the teacher is not attentive to the pupil. Similarly, most trainees were aware that the current diagnostic criteria for autism include the presence of 'highly restricted, fixated interests that are abnormal in intensity or focus' (DSM-5 APA, 2013) and were able to articulate that elements of the film (e.g. computer games, Lego toys, Spiderman) might be a 'special interest', but they did not speculate on reasons for the inclusion of these in this situation or what they might mean to the pupil.

### Conclusions

This paper began with an expression of the importance of including the autistic perspective within autism research. This importance has been largely confirmed by the findings of this study, in that 'research suggests that non-autistic people often misunderstand the behaviour of autistic people' (Kapp et al., 2019, p. 1782) and that 'neurotypicals are ineffective in interpreting the behaviour of those with ASD' (Sheppard et al., 2016 p. 1247). The fact that the trainee teachers who watched it only partially understood what it was trying to convey is an example of the 'double empathy problem' (Milton, 2012; Milton et al., 2018; Chown, 2013), which suggests that, while autistic individuals may have difficulty 'mind reading' non-autistic people, the same may be said of non-autistic individuals' abilities to mind-read autistic people. This 'disjuncture in reciprocity between two differently disposed social actors' (Milton, 2012 p. 884) explains why an expression of experiences that are both positive and negative can be verified as highly accurate by the autistic creator of the film, yet some



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aspects be misinterpreted by non-autistic viewers. However, far from being a reason to reject the validity of the film, this disparity has the potential to be used as a learning vehicle in its own right. Teachers working with autistic pupils will need to work hard to achieve full understanding; Wood (2020) discusses the need for perception and sensitivity in teachers if they are to be alert to the communicative intention of their autistic pupils. A silent autistic pupil may well be communicating through that silence their full focus on a learning task, in which case Wood cautions against over-zealously demanding a verbal response that may interrupt that child's learning. Equally, a quiet and apparently compliant child may, like Fauxparl, be bursting with a need to communicate, perhaps restrained by over adherence to rules (would a neurotypical child have abided for so long by the 'hands up and no calling out' classroom rule in the situation depicted in the film?).

The draft film appears to have significant potential to raise trainees' awareness of potential communication differences in autistic pupils. Trainees in this study did appear to gain some insight into the autistic perspective from the film, and most indicated that their greater understanding would increase their awareness of the inner life of autistic pupils who may not be articulating that perspective through overt behaviour. One indicated that '[the film] has allowed me to reflect on a teaching topic that I perhaps do not consider enough in my own practice', and another that 'as teacher it can be easy to focus on the here and now, what is in front of us, but that can't be the case with autistic individuals, as there is [sic] a lot of internal and mental challenges'. Although this greater awareness of the issue came, as described, from only partial understanding, it was nonetheless translated tentatively into reflection on how it might influence their teaching practices with autistic pupils.

### **Implications for development**

If the potential of the film as a support for trainee understanding is to be realised, a number of elements need to be addressed. The trainees' distress at the sensory effects of the film was unintentional, Fauxparl confirming that he finds the 'spinning' parts pleasurable; however, this element of the film was perceived by many trainees as 'flashing' rather than as spinning and was the part most cited as what they found overwhelming. It is important that an alternative, less sensorially challenging rendering of spinning be introduced in order to make this more apparent to trainee teachers and support their understanding of this element. In general, the immersion element of the film, whilst it is reported as effective in conveying a first-person perspective, may be giving an inadvertent suggestion of distress to the viewer. This should be remedied if trainees are to avoid an impression of 'suffering' or 'struggle' as this is a dangerous perception to encourage, positioning as it does the autistic pupil as victim. Trainees' misinterpretation of elements of the film is likely to be due to double-empathy issues, and greater support to overcome these challenges to understanding need to be made as intrinsic to the film if it is to support trainees' education. Trainees identified that they found the film 'hard to make sense of', and that it was 'difficult to understand what was happening'. The film is likely therefore to make for a more effective teacher education support if greater clarity regarding the autistic perspective could be rendered as part of it, perhaps through the addition of a narrative. Additionally, trainee resources to accompany the film may support a more measured response to the film that focusses less on an overwhelming sensory experience and more on the specifics of what is being portrayed.

The draft film *Broken* was created in the hope that 'teachers and trainee teacher will see this film and understand that this is something that they need to consider ... [in order to] encourage communication between pupils and teachers (Fauxparl, 2020, private correspondence). This pilot study suggests that more work needs to be done on the film if it is to be fully successful in meeting this objective. However, it also suggests that the intention of the film to raise awareness and consideration of communication issues in autism does appear to be valid. With further work it is hoped that the goal of supporting trainee teachers to accept the apparent contradictions that autism may bring and to

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have the confidence to think beyond pupil behaviour as an indicator of inner life and well-being, may be achieved.

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